

REMARKS

Applicants respectfully request reconsideration and allowance of the present application. Currently, claims 1-3, 6-7, 9-10, 14-15, and 42-50 remain pending in the present application, including independent claim 1. As shown above, the limitations of claim 8 have been incorporated into independent claim 1.

The Advisory Action rejected claims 1-3 and 7 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,853,978 of Stockum. Claims 8-10 were also rejected under § 103 in view of Stockum. Stockum is directed to an elastomeric medical glove consisting essentially of an outer elastomeric body and an inner coating containing an antimicrobial agent. The inner coating is capable of slowly releasing the antimicrobial agent in an amount and over a period of time sufficient to maintain an essentially bacteria-free and fungus-free environment within the glove after it has been donned. (Abstract). Stockum discloses two different types of inner coatings containing an antimicrobial agent, neither of which include a crosslinked hydrogel network, as required by independent claim 1.

The first type of layer disclosed by Stockum is a powder coating that is applied to the glove while it is on the former after the glove is cured. (Col. 2, line 56 – col. 3, line 2.) The powder coating includes a crosslinked starch (e.g., an epichlorohydrin cross-linked cornstarch), which becomes an antiblock and donning assist on the inside of the finished gloves. (Col. 2, lines 56-59, 68.) The composition of cornstarch, as commonly known in the art, can vary but is generally composed of amylopectin and amylose. Both amylopectin and amylose are polymers having glucose monomeric units.

The Final Office Action states that the crosslinked cornstarch is “capable of forming” a hydrogel because of “an abundance of hydrophilic groups.” (Office Action, pg. 3, paragraph 8.) Even if true, independent claim 1 is patentable over this embodiment of Stockum. In contrast to the glucose monomers of the crosslinked cornstarch, the crosslinked hydrogel network of independent claim 1 includes a polymer formed from a monomer is selected from the group consisting of vinyl pyrrolidones, hydroxyethyl acrylates, hydroxyethyl methacrylates, hydroxypropyl acrylates, hydroxypropyl methacrylates, acrylic acids, methacrylic acids, acrylic esters, methacrylic esters, vinyl pyridines, acrylamides, vinyl alcohols, ethylene oxides, derivatives thereof, and combinations thereof. The crosslinked cornstarch of Stockum does not include any of these specifically claimed monomers. The Advisory Action apparently concedes that this point by relying solely on the second type of layer discussed below.

The second type of layer disclosed by Stockum is a low coefficient of friction elastomeric coating. (Col. 4, lines 10-27.) The primary purpose of this layer is to provide an elastomeric, donning surface to the inside of the glove. Several types of suitable elastomeric polymers are given by Stockum, including carboxylated styrene butadiene lattices. This carboxylated styrene butadiene copolymer is a rubber material, which is not a “hydrogel” as known to one of ordinary skill in the art.

Nonetheless, the Office Action states that the carboxylated styrene butadiene lattices are “capable of forming” a hydrogel because of “an abundance of hydrophilic groups.” (Office Action, pg. 3, paragraph 8.) One of ordinary skill in the art would recognize, however, that the rubber material formed from the carboxylated styrene butadiene lattice is not a hydrogel. Applicants note that independent claim 1 has been

amended to clarify that the hydrogel forms a three-dimensional network that is substantially water-insoluble, and achieves a water content of from about 20% to about 90% when exposed to water. One of ordinary skill in the art would recognize that the carboxylated styrene butadiene lattice of Stockum would not achieve such a water content. Thus, this embodiment of Stockum does not teach all of the limitations of independent claim 1.

The deficiencies of Stockum do not end with the failure of both embodiments to disclose the monomers claimed by independent claim 1. Stockum teaches that “the inner coating is free of any additive materials that would tend to deliver the active ingredient to the wearer.” (Col. 3, lines 57-61, emphasis added.) Stockum goes on to specifically “exclude” materials including “vehicles that would cause the active antimicrobial to pass through the skin of the wearer.” (Col. 3, lines 61-64, emphasis added.) On the other hand, the crosslinked hydrogel network of independent claim 1 releases the active agent from the network when the coating is contacted with an aqueous environment. Thus, the active agent can contact the skin of the wearer after the glove is donned due to the fluids secreted by eccrine glands or from some other source. This intended release of the crosslinked hydrogel network of independent claim 1 is in direct contrast with the teachings of Stockum. In fact, the crosslinked hydrogel network is expressly “excluded” from the coatings of Stockum. As such, Applicants respectfully submit that independent claim 1 is patentable over Stockum, either alone or in any combination.

The Office Action also rejected independent claim 1 under 35 U.S.C. § 102(b) as being anticipated by European Patent No. EP 0 455 323 A2 of Potter. Potter discloses

a method of making a flexible rubber article having a lubricated layer formed from a hydrogel polymer and a surfactant bonded thereto so as to provide a skin-contacting surface of the article. (Pg. 2, lines 25-27.) The surfactant can be a cationic surfactant that serves to inhibit bacterial growth when the layer formed from the hydrogel polymer is in contact with the skin. (Pg. 3, lines 5-6.)

Potter fails to disclose, however, all of the limitations of independent claim 1. Potter discloses that the lubricating layer is formed from a hydrogel polymer and a surfactant. However, Potter completely fails to disclose or suggest the presence of a skin conditioner, such as an emollient, a humectant, an antioxidant, or a botanical agent. Potter simply discloses that a surfactant can be incorporated into the hydrogel, and when the surfactant is cationic, it may have some antimicrobial properties.

In stark contrast, independent claim 1 of the present application requires that the hydrogel layer can release the active agent when it is contacted with an aqueous environment. Thus, the skin conditioner can provide a benefit to the wearer of the glove. Thus, Applicants respectfully submit that independent claim 1 is patentable over Stockum, either alone or in any combination.

Applicants also respectfully submit that for at least the reasons indicated above relating to corresponding independent claims, the pending dependent claims patentably define over the references cited. However, Applicants also note that the patentability of the dependent claims certainly does not hinge on the patentability of independent claims. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of the independent claims.

Applicants respectfully submit that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Marcetich is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Amendment.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully requested,

DORITY & MANNING, P.A.

A handwritten signature in black ink, appearing to read 'Alan R. Marshall', written over a horizontal line.

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Date: April 21, 2008